

CLAIMS

What is claimed is:

1. A method for transmitting a data stream between a base station and user terminal comprising:

selecting at the base station a first radio frequency (RF) resource to transmit a page;

transmitting the page from the base station via the first RF resource;

receiving the page at the user terminal via the first RF resource;

selecting at the user terminal a resource to transmit a page response, the resource comprising a sequence of radio frequency resources that follow a hopping sequence;

✓ transmitting the page response from the user terminal via the resource in response to the page; and

transmitting the data stream between the base station and user terminal via a second RF resource.

2. The method of claim 1, wherein the first RF resource comprises a first RF resource that is available.

3. The method of claim 2, wherein the resource comprises a resource that is available.

4. The method of claim 1, wherein the resource comprises a sequence of radio frequency resources that follow a hopping sequence among a set of radio frequency channels.

5. The method of claim 1, wherein the resource comprises a sequence of radio frequency resources that follow a hopping sequence among a set of time slots.

6. The method of claim 1, wherein the resource comprises a sequence of radio frequency resources that follow a hopping sequence among a set of code division multiple access codes.

7. The method of claim 1, wherein selecting at the user terminal a resource to transmit a page response includes computing a function at the user terminal for the resource to select.

8. The method of claim 7, wherein computing a function at the user terminal for the resource to select comprises searching a look up table at the user terminal for the resource to select.

9. The method of claim 7, wherein computing a function at the user terminal for the resource to select includes searching a look up table using information from the page to perform the search.

10. The method of claim 8, wherein searching a look up table using information from the page to perform the search.

11. The method of claim 7, wherein computing a function at the user terminal for the resource to select includes searching a look up table using information implicit in at least one of the page and the first resource.

12. The method of claim 8, searching a look up table using information implicit in at least one of the page and the first resource.

13. The method of claim 1, wherein transmitting the page from a base station via the RF resource comprises transmitting the page including page identifier assigned to the user terminal from the base station via the RF resource.

14. The method of claim 13, wherein receiving the page at the user terminal via the RF resource further comprises examining whether the page identifier in the page matches the page identifier assigned to the user terminal.

15. The method of claim 14, wherein transmitting the page response from the user terminal via the resource in response to the page comprises transmitting the page response from the user terminal via the resource in response to the page if the page identifier in the page matches the page identifier assigned to the user terminal.

16. The method of claim 1, further comprising transmitting a message from the base station acknowledging the page response.

17. The method of claim 16, the message identifying the second RF resource for transmitting a data stream between the base station and user terminal.

18. A method for transmitting a data stream comprising:
selecting at a base station a radio frequency resource to transmit a page; ✓
transmitting the page from the base station via the RF resource; ✓
receiving a page response from a user terminal via a first resource in response to the page, the first resource comprising a sequence of radio frequency resources that follow a hopping sequence;
transmitting a message from the base station acknowledging the page response.

19. The method of claim 18, the message identifying a second resource for transmitting a data stream between the base station and the user terminal.

20. The method of claim 19, the second resource comprising a sequence of radio frequency resources that follow a hopping sequence.

21. The method of claim 20; further comprising transmitting the data stream to the user terminal via the second resource.

22. The method of claim 21, wherein the RF resource comprises a RF resource that is available. ✓

23 . The method of claim 20, wherein the second resource comprises the same sequence of radio frequency resources that follow a hopping sequence as the first resource.

24. The method of claim 20, wherein the second resource comprises a different sequence of radio frequency resources that follow a hopping sequence as the first resource.

25. The method of claim 18, wherein transmitting the page from the base station via the RF resource comprises transmitting the page including page identifier assigned to the user terminal from the base station via the RF resource. ✓

26. The method of claim 18, wherein the sequence of radio frequency resources follow a hopping sequence among one of a set of radio frequency channels, a set of time slots, and a set of code division multiple access codes.

27. A method for transmitting a data stream comprising:
receiving a page from a base station at a user terminal via a radio frequency resource;
selecting at the user terminal a first resource to transmit a page response, the first resource comprising a sequence of radio frequency resources that follow a hopping sequence;
transmitting the page response from the user terminal via the first resource in response to the page;
receiving a message from the base station acknowledging the page response.

28. The method of claim 27, the message identifying a second resource for transmitting a data stream between the base station and a user terminal, the second resource comprising a sequence of radio frequency resources that follow a hopping sequence.

29. The method of claim 28, further comprising transmitting the data stream to the base station via the second resource.

30. The method of claim 27, wherein the sequence of radio frequency resources follow a hopping sequence among one of a set of radio frequency channels, a set of time slots, and a set of code division multiple access codes.

31. The method of claim 27, wherein the first resource comprises a first resource
✓ that is available.

32. The method of claim 27, wherein the second resource comprises the same sequence of radio frequency resources that follow a hopping sequence as the first resource.

33. The method of claim 27, wherein the second resource comprises a different sequence of radio frequency resources that follow a hopping sequence as the first resource.

34. The method of claim 27, wherein selecting at the user terminal a first resource to transmit a page response includes computing a function at the user terminal for the first resource to select.

35. The method of claim 34, wherein computing a function at the user terminal for the first resource to select comprises searching a look up table at the user terminal for the first resource to select.

36. The method of claim 34, wherein computing a function at the user terminal for the first resource to select includes searching a look up table using information from the page to perform the search.

37. The method of claim 27, wherein receiving a page from a base station at a user terminal via a RF resource includes receiving a page identifier.

38. The method of claim 37, wherein receiving the page at the user terminal via the RF resource further comprises examining whether the page identifier in the page matches the page identifier assigned to the user terminal.

39. The method of claim 38, wherein transmitting the page response from the user terminal via the first resource in response to the page comprises transmitting the page response from the user terminal via the first resource in response to the page if the page identifier in the page matches the page identifier assigned to the user terminal.

40. An article of manufacture, comprising:

a machine accessible medium providing instructions, that when executed by a machine, cause the machine to:

select a radio frequency resource to transmit a page; ✓

receive a page response via a resource in response to the page;
transmit a message acknowledging the page response, the message identifying
a second resource for transmitting a data stream; and
transmit the data stream via the second resource;
wherein one of the first and second resources comprises a sequence of radio
frequency resources that follow a hopping sequence.

41. The article of manufacture of claim 40, wherein the one of the first and
second resources that comprises a sequence of radio frequency resources that
follow a hopping sequence, comprises a sequence of radio frequency resources
that follow a hopping sequence among one of a set of radio frequency channels,
a set of time slots, and a set of code division multiple access codes.

42. The article of manufacture of claim 40, wherein the instructions, that when
executed cause the machine to transmit the page via the RF resource comprises
instructions, that when executed cause the machine to transmit the page
including a page identifier assigned to a user terminal via the RF resource.

43. The article of manufacture of claim 40, wherein the instructions, that when
executed by a machine, cause the machine to select a first resource to transmit a
page, comprise instructions, that when executed by the machine, cause the
machine to select a first resource that is available to transmit a page.

44. An article of manufacture, comprising:

a machine accessible medium providing instructions, that when executed by a machine, cause the machine to:

receive a page via a radio frequency resource;

select a first resource to transmit a page response;

transmit the page response via the first resource in response to the page;

receive a message acknowledging the page response, the message identifying a second resource for transmitting a data stream; and

transmit the data stream via the second resource;

wherein one of the first and second resources comprises a sequence of radio frequency resources that follow a hopping sequence.

45. The article of manufacture of claim 44, wherein the one of the first and second resources that comprises a sequence of radio frequency resources that follow a hopping sequence, comprises a sequence of radio frequency resources that follow a hopping sequence among one of a set of radio frequency channels, a set of time slots, and a set of code division multiple access codes.

46. The article of manufacture of claim 44, wherein the instructions, that when executed by the machine, cause the machine to select a first resource to transmit

a page response comprises first resource that is available to transmit a page response.

47. The article of manufacture of claim 44, wherein the instructions, that when executed by the machine, cause the machine to select a first resource to transmit a page response comprises instructions, that when executed by the machine, cause the machine to compute a function for the first resource to select.

48. The article of manufacture of claim 47, wherein the instructions, that when executed by the machine, cause the machine to compute a function for the first resource to select comprises instructions, that when executed by the machine, cause the machine to search a look up table for the first resource to select.

49. The article of manufacture of claim 47, wherein the instructions, that when executed by the machine, cause the machine to compute a function for the first resource to select comprises instructions, that when executed by the machine, cause the machine to search a look up table using information from the page to perform the search.

50. The article of manufacture of claim 49, wherein the instructions, that when executed by the machine, cause the machine to receive the page via the RF resource further comprises instructions, that when executed by the machine,

cause the machine to receive a page including a page identifier and examine whether the page identifier in the page matches the page identifier assigned to the machine.

51. The article of manufacture of claim 50, wherein the instructions, that when executed by the machine, cause the machine to transmit the page response via the first resource in response to the page comprises instructions, that when executed by the machine, cause the machine to transmit the page response via the first resource in response to the page if the page identifier in the page matches the page identifier assigned to the machine.